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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/532,638	04/22/2005	Paul Francis Clarke	3700.P0392US	5662		
	7590 02/17/201 L BOUTELL & TANIS		3700.P0392US 5662  EXAMINER  HOOVER, MATTHEW  ART UNIT PAPER NUMBER  1791	IINER		
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KALAMAZOU	), MI 49008-1631		ART UNIT	PAPER NUMBER		
			1791	791		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
Office Action Commence	10/532,638	CLARKE, PAUL FRANC	els		
Office Action Summary	Examiner	Art Unit			
	MATTHEW HOOVER	1791			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	I. ely filed the mailing date of this communic (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 23 No	ovember 2009.				
,—	action is non-final.				
3) Since this application is in condition for allowar		secution as to the merit	s is		
closed in accordance with the practice under E	,				
Disposition of Claims					
4)⊠ Claim(s) <u>1-9 and 11-24</u> is/are pending in the ap	polication.				
4a) Of the above claim(s) is/are withdraw					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-9 and 11-24</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.				
Application Papers	·				
<u> </u>					
9) The specification is objected to by the Examine		·			
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the			2471)		
Replacement drawing sheet(s) including the correcti					
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action of form PTO-152	2.		
Priority under 35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(d) or (f).			
a)⊠ All b)□ Some * c)□ None of:					
<ol> <li>Certified copies of the priority documents</li> </ol>	s have been received.				
<ol><li>Certified copies of the priority documents</li></ol>	have been received in Application	on No			
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau	application from the International Bureau (PCT Rule 17.2(a)).				
* See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)					
1) Notice of References Cited (PTO-892)	4) Interview Summary				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da 5) Notice of Informal P				
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	6) Other:	лот другоаноп			

## **DETAILED ACTION**

The amendment filed 11/23/09 has been entered. Claims 1-15 and 17-24 remain pending in this application.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-9, 11-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes (US 4807647) in view of Yoshida (US 6206007).

Regarding claims 1-3, 5-7 and 19-22 Hayes teaches an upstream filter with a high pressure drop (draw resistance) filter and a second downstream low pressure drop filter (abstract). Figure 4 shows the wrapper (#6) which wraps around the component

and provides ventilation and defines the cavity (abstract). Hayes also teaches that the high draw resistance upstream filter has tar retention of 12% (table 2) and the low draw resistance (downstream) filter has a tar retention of 30% (column 49-55), with a specific example of 27% (table 2).

Hayes does not disclose that the draw resistance for the downstream filter is greater than the upstream filter's draw resistance.

Yoshida teaches a dual filter smoking article in which the up stream filter has a draw resistance of 25 mmWG and can decrease to 12.5mmWG (column 9 lines 46-53, 61-67 and column 10 lines 1-4). It also teaches that the downstream filter has a draw resistance of 75mmWG (column 9 lines 46-53).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the filter in Hayes with filter from Yoshida. The rationale to do so would have been the motivation provided by the teaching of Yoshida that to do so would predictably provide a decrease in tar and nicotine (column 8 lines 64-67 and column 9 lines 1-7).

Regarding claim 4, the teachings of Hayes and Yoshida are disclosed above.

Neither Hayes nor Yoshida teaches that the tar retention for the down stream filter is between 35-45%.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the specified tar retention range. Since it has been held that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover

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relationship.

the optimum or workable ranges by routine experimentation." See MPEP 2144.05(II)(A) and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)

Regarding claims 8-9, the teachings of Hayes and Yoshida are disclosed above. Hayes also teaches that the filter wrapper provides ventilation, which means it is air permeable (abstract).

Regarding claims 11-14, the teachings of Hayes and Yoshida are disclosed above. Hayes also teaches that the filter and tobacco rod are joined by a permeable ventilating tipping overwrap which has ventilating perforations, which would register with the cavity (column 1 lines 43-54). The filter paper wrap is also air permeable (column 1 lines 5-27). The many perforations inherently allow air to pass through the components into and out of the cavity in any direction, which would include laterally.

Regarding claim 17, the teachings of Hayes and Yoshida are disclosed above.

The filter (figure 2 #2 and 4) is attached to a tobacco rod (figure 2 #8), which is wrapped (column 1 lines 39-62).

Regarding claim 18, the teachings of Hayes and Yoshida are disclosed above.

Hayes does not teach the joining of multiple filters end to end in mirror image

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It would have been obvious to one of ordinary skill in the art at the time of the invention to use multiple filters since it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. See MPEP 2144.04(VI)(B) and see *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). The invention of Hayes is of a multiple filter cigarette filtration device in which the filters (figure 2 #2 and 4) are attached end to end (figure 2). It would have been obvious to add multiple filters since it is already taught in the original invention to have more than one filter, thereby improving filtering ability and removal of CO.

Regarding claim 23, the teachings of Hayes and Yoshida are disclosed above.

Regarding claim 24, the teachings of Hayes and Yoshida are disclosed above.

Claims 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes (US 4807647) in view of Yoshida (US 6206007) and in further view of Banerjee (US 5839449).

Regarding claim 15, the teachings of Hayes and Yoshida are disclosed above. Hayes also teaches that the CO delivery is 5mg and that CO/tar delivery rate is 0.5 (table 3).

Neither Hayes nor Yoshida teaches that the CO delivery is less than 5 mg.

Banerjee teaches a multiple filter cigarette and a method of making that has a CO delivery of 4.9mg (column 5 lines 1-14).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the filter in Hayes and Yoshida multiply to obtain the CO amount from Banerjee. The rationale to do so would have been that CO is bad for ones health, which is commonly known in the art. Therefore it would have been obvious to use the process disclosed in Banerjee to reduce the CO, while still trying to provide a good tasting cigarette (column 2 lines 53-62).

## Response to Arguments

Applicant's arguments, see applicant's arguments and remarks, filed 11/23/09, with respect to the rejection(s) of claim(s) 1-9 and 10-24 under U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hayes (US 4807647) in view of Yoshida (US 6206007) and in further view of Banerjee (US 5839449).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW HOOVER whose telephone number is (571)270-7663. The examiner can normally be reached on Mon-Thurs 7am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katarzyna I. Wyrozebski can be reached on (571) 272-1127. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MH/ Examiner AU1791 /KHANH NGUYEN/ Primary Examiner, Art Unit 1791